

Minutes

Meeting name Balancing Services Standing Group (BSSG)

Date of meeting 30 October 2013

Location National Grid House, Warwick

Attendees

Name	Initials	Company
Mike Edgar	ME	Chair
Eleanor Brogden	EB	Technical Secretary
Graham Stein	GS	National Grid
Rebecca Yang	RY	National Grid
Campbell McDonald	CM	SSE
Guy Philips	GP	E.ON
Hannah Mckinney	НМ	DONG Energy - Teleconference
Lee Taylor	LT	GDF SUEZ - Teleconference
Simon Reid	SR	Scottish Power
Stephen Galsworthy	SG	Open Energi
Raoul Thulin	RT	RWE - Teleconference
Simon Lord	SL	GDF Suez
John Prendergast	JP	RES - Teleconference

Apologies		
Name	Initials	Company
Cem Suleyman	CS	Drax
Louise McGoldrick	LM	SSE
Lisa Waters	LW	Waters Wye
Garth Graham	GG	Soni Ltd
Jacques Arbeille	JA	Energy Pool
John Costa	JC	EDF Energy

All presentations and supporting papers for the BSSG meeting can be found at:

http://www.nationalgrid.com/uk/Electricity/Codes/systemcode/workingstandinggroups/



1 Introductions/Apologies for Absence

1. The Chair welcomed the group, giving timescales.

2 Agree Minutes of the BSSG 4th September

2. The draft minutes of the Balancing Services Standing Group meeting held on the 4th September 2013 were approved with no further comments, the minutes will be made available on the National Grid Code Website.

3 Review the Actions

3. Action: BSSG members to forward cost benefit information to cusc.team@nationalgrid.com by end of September.

GS/ RY: we have not received any comment or information on cost of implementation of Rapid Frequency Response from members.

Status Closed

4. Action: Frequency Response cost benefit analysis to be placed on the next BSSG meeting agenda.

Status: Agenda Item 4 Closed

5. Action: BSSG members to consider any Frequency Response Energy Payment alternatives and email them to cusc.team@nationalgrid.com.

RY: No comments have been received from the BSSG members.

Status Closed

6. Action: National Grid to provide information on Holding Payments paid in 2012/13.

Status: Agenda Item 5 Closed

7. Action: National Grid to explore changes to the algorithm as a consequence of the costs changing.

Status: Agenda Item 5 Closed

8. Action: National Grid to confirm whether CUSC can incorporate an optional mechanism for energy payment.

RY confirmed that initial view is that there is nothing to prevent introduction of an optional methodology, however, as this methodology is defined in s.4 of the CUSC for a mandatory service and therefore would not be appropriate to have an optional methodology. New methodology would be applicable only to renewable power stations.

Status Closed

4 Rapid Frequency Response

- GS delivered a presentation on the work undertaken to evaluate costs and benefits of a mandatory Rapid Frequency Response service. The presentation covered the background of the service development, frequency response requirements at different demand levels and the benefits of the service.
- 10. ME noted that The European Code has set the lower frequency limit to 49.2Hz. The current operational limits are to operate within 50.2Hz 49.8Hz with a fall in frequency of 0.8Hz following the largest loss i.e. 49.2Hz to 49Hz., The European Code change implies that, regardless of the starting point, the frequency must not fall below 49.2Hz, so it may be a more onerous requirement for the future.
- 11. CM questioned whether a proposed requirement for Rapid Frequency Response was consistent with the draft Load Frequency Control and Reserves European Code.

Action: GS to clarify definition of primary & the interaction between this proposal & the definitions in LFCR.

- 12. SL pointed out that the slide on the requirements showing the times when there is limited plant on the system. It implies that the rapid frequency response requirement is only applicable when there is limited inertia on the system.
- 13. GS confirmed that the value of Rapid Frequency Response is greater at times when inertia is lower. The requirement expressed is for the same MW, but faster. RT questioned whether it is a credible assumption that the same response would be delivered if the measurement point is changed.
- 14. GS suggested that NGET may need to consider how it informs the industry about new large infeed loss risks changes. ME agreed with GS that NGET needs to review how to communicate when the requirement would increase.

Actions: NG to consider how to capture infeed loss risks in future Balancing Services requirements

- 15. SL suggested that the information on when the potential criteria are met and when it is active should be included in the proposal so that the industry can consider in an appropriate way.
- 16. GS responded that this should be captured in the future frequency response requirements paper.
- 17. SL raised a concern that the costs required to enable all new asynchronous plant to comply with rapid frequency response capability requirement may fall on one party (e.g. asynchronous generation) whilst the benefits may fall on another group (e.g. synchronous plants) as asynchronous plants are currently used infrequently. The market arrangement should enable the parties who incur the cost to be utilised to claw back the investment, for example, introduction of capability fee. CM agreed with SL's comments that the asynchronous plants would have to try and cover the cost of implementing the capability over a small number of hours.
- 18. ME agreed that it would be important to understand the number of hours that this service would be used taking into account different scenarios. SL suggested it would be informative to undertake an assessment with the current system and then with the predicated future system taking into account inertia and constraints issues.
- 19. CM suggested that synchronous wind generation also needs to be considered as not all wind generation is asynchronous. CM noted that large developments offshore will be synchronous; therefore this is a sensitivity which should be considered in any analysis. ME added that it would be important to understand synchronous wind generation's contribution to system inertia.

- 20. SL queried whether NGET has had any actual cost information and whether any test has been undertaken to demonstrate renewable generation has the technical capability to meet the requirement.
- 21. GS responded that test data from manufacturers has been received. The physical capabilities have not been the restriction in the cases examined so far. It is recognised that Interconnectors' capability is influenced by the energy source for the interconnector.
- 22. JP queried whether other sources of rapid frequency response have been considered e.g. battery storage which may have a more rapid response capability. ME noted that the working group is split out into BSSG and CBSG; BSSG is for mandatory service from generators and CBSG will consider in more detail commercial services provided by all type of service providers. SG commented that there are some technologies that can provide response such as demand side that will grow and will be in the commercial market. ME confirmed that if there was a cost effective solution available commercially, it would compete with the mandatory service. SL also commented that the commercial market would be impacted by the mandatory market; It would be difficult for commercial generators to effectively compete against generators who have been mandated to provide a service and incurred sunk costs. For example, mandatory service providers may offer lower prices that do not include the cost of implementation whereas commercial providers would need to include investment costs in addition to ongoing costs.
- 23. SL questioned whether this service should be mandatory or commercial service if the requirement is for limited hours a year. The industry will want to see the commercial arrangements before it considers the mandatory.

Action: GS to consider the comments from the BSSG members whilst developing the industry consultation paper on Rapid Frequency Response.

5 Frequency Response Energy Payment

- 24. RY delivered a presentation on Frequency Response Energy Payment. The presentation covered the current arrangements, analysis on historical holding and energy costs and the proposed high level options with pros and cons. She highlighted the objectives of the review were to incentive renewables to participate in the frequency market, increase the competition and hence reduce the overall frequency cost to the industry and consumers.
- 25. RY requested the BSSG to identify a preferred option for further analysis. HM suggested that Option 3 looks like the preferred option. RY responded that Option 3 does compensate the renewables more accurately but would cause the optimisation despatch issue which stems from historic discussions in the industry when the existing arrangement was designed in the first place. These were to allow:
 - the industry to individually submit fees based on fuel costs; and
 - the optimisation of dispatch given that the energy volume for response is unknown ahead of time because the energy volumes were not known ahead of time, this would not allow for optimization of despatch.
- 26. ME confirmed that the SO considers the holding payments, Bid & Offer Prices and , capabilities in despatch. For the purposes of optimisation, the energy payments are ignored as volumes are not known.
- 27. RT questioned if the same disadvantage of despatch would appear in Option 2. RY acknowledged this and noted that the SO could overcome this by making assumptions to support optimisation despatch. RT questioned why a similar approach could not support multiple prices. ME noted that the current Option 1 could be seen as a deterrent for wind farms to provide frequency response; Option 2 would still not fully address loss of ROCs, but it mitigates the risk to some degree and suppliers can still use holding prices to cover the residual pricing risk; Option 3 would be more difficult to implement.

- 28. CM & SL suggested other options such as industry administrative price; deemed bid & offer were discussed previously but conceded impractical; however it is recognised that Option 3 would not work and Option 2 seems to be the best alternative to Option 1.
- 29. SL highlighted that some conventional generation that may have similar payment issues such as biomass and therefore it would be worthwhile considering offering two mechanisms for generators to choose the one more suitable for their units and allow them to select and change in a reasonable but less frequent manner.
- 30. CM raised that the ROCs regime finishes in 2017 and this is likely to be subsumed into CfD. ME agreed that ROCs cannot be the definition and SL's suggestion of self selection has some merit.
- 31. RT confirmed that the ratio in the current formula (1.25 & 0.75) was an attempt to mirror the System Sell and System Buy prices.
- 32. ME summarised that the BSSG group recognized that Option 2 is a compromise solution and that the definition of applicable generator for the new mechanism should be carefully considered. The receipt of ROCs would not be a suitable defining characteristic. The group also considered that there was no perverse reason why a party would select the wrong option so long as the time frame for it to be changed was not limited.
- 33. RY highlighted that further analysis is required to support the industry consultation should Option 2 is taken forward.
- 34. SL suggested that, based on the options that have been developed, it should be sufficient to take the issue forward to the CUSC change panel which is likely to set up a working group to undertake the necessary analysis.

Action: RY to put a proposal forward for the CUSC Change Panel summarising the discussions and conclusions in the BSSG.

6 Any other business

35. There were no AOB items from the group.

Next Meeting

36. The next meeting is to be confirmed.